NEUROPATHOLOGY AND APPLIED NEUROBIOLOGY

Journal of the British Neuropathological Society

Editor
R. O. WELLER

Editorial Board
J. B. CAVANAGH
LOUISE CUZNER
FRANÇOISE GRAY
I. R. GRIFFITHS
J. W. IRONSIDE
P. G. E. KENNEDY
J. S. LOWE
JANICE R. ANDERSON
Secretary of the Society, *ex officio*

1991
Volume Seventeen

BLACKWELL SCIENTIFIC PUBLICATIONS
OXFORD · LONDON · EDINBURGH · BOSTON · MELBOURNE · BERLIN · PARIS · VIENNA

© 1991 Blackwell Scientific Publications
Osney Mead, Oxford OX2 0EL
25 John Street, London WC1N 2BL
23 Ainslie Place, Edinburgh EH3 6AJ
3 Cambridge Center, Suite 208, Cambridge, MA 02142, USA
54 University Street, Carlton, Victoria 3053, Australia

Other Editorial Offices:
Arnette SA
2, rue Casimir-Delavigne
75006 Paris
France

Blackwell Wissenschaft
Meinekestrasse 4
D-1000 Berlin 15
Germany

Blackwell MZV
Feldgasse 13
A-1238 Wien
Austria

Al rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the copyright owner

Set in Monophoto Times

Printed in Great Britain by Henry Ling Ltd,
at the Dorset Press, Dorchester, Dorset

CONTENTS

Number 1, February 1991

1 Editorial

2 Referees 1990

3 Annotation. What have we learnt from Graham Frederick Young? Reflections on the mechanism of thallium neurotoxicity
J. B. Cavanagh

11 Ultrastructural localization of Factor VIII-related antigen in endothelial proliferations of malignant gliomas
A. Migheli, A. Attanasio, C. Mocellini and D. Schiffer

17 Nucleolar organizer regions and post-operative survival in glioblastoma multiforme
J. A. R. Nicholl and E. Candy

21 Immunochemical detection of sodium channel in human tissue and cell lines
S. Love, S. P. Bourne and D. Baines

29 The incidence of prenatal brain injury
M. Squier and J. W. Keeling

39 Ubiquitin and heat shock protein expression in amyotrophic lateral sclerosis
O. Garofalo, P. G. E. Kennedy, M. Swash, J. E. Martin, P. Luthert, B. H. Anderton and P. N. Leigh

47 Aluminium maltol-induced neurocytoskeletal changes in fetal rabbit midbrain in matrix culture
C. D. Hewitt, M. M. Herman, M. B. S. Lopes, J. Savory and M. R. Wills

61 Triphenyltetrazolium chloride (TTC) as a marker for ischaemic changes in rat brain following permanent middle cerebral artery occlusion
R. H. Hatfield, A. D. Mendelow, R. H. Perry, L. M. Alvarez S. and P. Modha

69 Case report. Post-traumatic Alzheimer's disease: preponderance of a single plaque type
J. Clinton, M. W. Ambler and G. W. Roberts

75 Case report. Pituitary hyperplasia after goserelin (LHRH-analogue) therapy
H. Radner, K. Pummer, S. Lax, G. Wandschneider and H. Höfler

83 Obituary: Alfred Meyer

88 Future meetings

89 Book reviews

Number 2, April 1991

91 Annotation. Neurotoxic acrylamide and neurotrophic melanocortin peptides — can contrasting actions provide clues about modes of action?
P. M. Edwards, E. Sporel-Ozakat and W. H. Gispen

105 Stress protein inclusions in cerebral vessels in dialysis encephalopathy
J. E. Martin, K. Mather, M. Swash, S. M. Dodd, G. E. Dale, O. Garofalo and P. N. Leigh

113 Heat shock protein expression in corpora amylacea in the central nervous system: clues to their origin
J. E. Martin, K. Mather, M. Swash, O. Garofalo, P. N. Leigh and B. H. Anderton

121 Cell proliferation in intracranial tumours: selective silver staining of nucleolar organizer regions (AgNORs). Application to surgical and experimental neuro-oncology
K. H. Plate, J. Rüschoff and H. D. Mennel

133 Propionic acidaemia: a neuropathological study of two patients presenting in infancy
B. N. Harding, J. V. Leonard and M. Erdohazi

139 Heat shock in cultured neurons and astrocytes: correlation of ultrastructural and heat shock protein synthesis
R. N. Nishimura, B. E. Dwyer, H. V. Vinters, J. De Vellis and R. Cole

149 Case report: granulomatous angiitis and cerebral amyloid angiopathy presenting as a mass lesion
P. Le Coz, J. Mikol, J. Ferrand, F. Woimant, C. Masters, K. Beyreuther, M. Haguenau, J. Cophignon and B. Pepin

157 Case report: multinucleated giant cell myelitis in an AIDS patient
C. Geny, R. Gherardi, P. Boudes, F. Lionnet, P. Cesaro and F. Gray

163 Case report: Hurler's disease with diastematomyelia
C. Keohane, J. O'Leary, M. O'Neill and P. J. Kearney

169 Obituary: William Blackwood

171 Future meetings

172 Book reviews

176 Journal Bursary Announcement

Number 3, June 1991

177 Spindle-cell glioblastoma or gliosarcoma?
H. Jones, P. V. Steart and R. O. Weller

189 Widespread serum amyloid P immunoreactivity in cortical amyloid deposits and the neurofibrillary pathology of Alzheimer's disease and other degenerative disorders
R. N. Kalaria, P. G. Galloway and G. Perry

203 Neuronal hypertrophy in the pars reticula of the substantia nigra in Parkinson's disease
J. W. Neal, R. C. A. Pearson, G. Cole and T. P. S. Powell

207 Expression of alternative isoforms of the neural cell adhesion molecule (NCAM) on normal brain and a variety of brain tumours
G. Frost, K. Patel, S. Bourne, H. B. Coakham and J. T. Kemshead

219 Short communication. B and T lymphocytes are affected in lysosomal disorders — an immunoelectron microscopic study
W. Brück, H. H. Goebel and P. Dienes

223 Respiratory burst activity in brain macrophages: a flow cytometric study on cultured rat microglia
R. B. Banati, G. Roth, G. Valet and G. W. Kreutzberg

231 Reversible Schwann cell hypertrophy in lead neuropathy
F. Monton and F. Coria

237 Letter to the Editor: Decontamination of Creutzfeldt-Jakob disease agent: current strategies
D. M. Taylor

239 Proceedings of the eighty-first meeting of the British Neuropathological Society

259 Future meetings

260 Book reviews

Number 4, August 1991

265 Annotation. Multiple sclerosis: a pivotal role for the T cell in lesion development
C. S. Raine

275 Loss of axonal contact causes down-regulation of the PLP gene in oligodendrocytes: evidence from partial lesions of the optic nerve
K. McPhilemy, I. R. Griffiths, L. S. Mitchell and P. G. E. Kennedy

289 Cerebral endothelial cell infection by measles virus in subacute sclerosing panencephalitis: ultrastructural and *in situ* hybridization evidence
J. Kirk, A.-L. Zhou, S. McQuaid, S. L. Cosby and I. V. Allen

299 Multiplication of rubella and measles viruses in primary rat neural cell cultures: relevance to a postulated triggering mechanism for multiple sclerosis
G. J. Atkins, D. A. Mooney, D. A. Fahy, S. H. Ng and B. J. Sheahan

309 Membrane flow within the myelin sheath in IDPN neuropathy
A. E. Blaurock, M. B. Genter St Clair and D. G. Graham

323 Rumpshaker: an X-linked mutation affecting CNS myelination. A study of the female heterozygote
M. L. Fanarraga, I. R. Griffiths, M. C. McCulloch, J. A. Barrie, B. M. Cattanach, P. J. Brophy and P. G. E. Kennedy

335 Changes in muscle plasma membranes in young mice with X chromosome-linked muscular dystrophy: a freeze-fracture study
S. Shibuya and Y. Wakayama

345 Letter to the Editor: Spongiform encephalopathies
D. M. Taylor: J. Collinge

347 Future meetings

348 Journal Bursary Announcement

349 Book reviews

Number 5, October 1991

353 Annotation. Animal models of muscular dystrophy — what can they teach us?
T. Partridge

365 Demonstration of β amyloid protein-containing neurofibrillary tangles in parkinsonism-dementia complex on Guam
H. Ito, A. Hirano, S.-H. Yen and S. Kato

375 Autopsy neuropathological findings in 'burnt out' herpes simplex encephalitis and use of the polymerase chain reaction to detect viral DNA
J. A. R. Nicholl, N. J. Maitland and S. Love

383 An immunohistological study of macrophages in the human fetal brain
S. J. Gould and S. Howard

391 Barrier functions of the leptomeninges: a study of normal meninges and meningiomas in tissue culture
D. J. Feuer and R. O. Weller

407 The glial reaction in closed head injuries
D. A. Crooks, C. L. Scholtz, G. Vowles, S. Greenwald and S. Evans

415 Inflammatory demyelinating lesions in two patients with IgM monoclonal gammopathy and polyneuropathy
A. Vital, D. Latinville, M. Aupy, P. Dumas and C. Vital

421 Technical note. A method to quantitate axonal injury
D. A. Crooks

425 Future meetings

426 Journal Bursary Announcement

427 Meeting report

429 Book reviews

Number 6, December 1991

433 Hypothesis. Herpes simplex virus latency in the nervous system — a new model
I. Steiner and P. G. E. Kennedy

441 Developmental profile of plasma proteins in human fetal cerebrospinal fluid and blood
J. E. Bell, A. A. Fryer, M. Collins, T. Marshall, P. W. Jones, R. Strange and R. Hume

457 A primary demyelinating disorder of young cattle
A. C. Palmer, P. G. G. Jackson and W. F. Blakemore

469 Coronavirus induced primary demyelination: indications for the involvement of a humoral immune response
F. Zimprich, J. Winter, H. Wege and H. Lassmann

485 The site of the lesion causing hearing loss in bacterial meningitis: a study of experimental streptoccocal meningitis in guinea-pigs
R. Kay

495 Vascular factors in the neurotoxic damage caused by 1,3-dinitrobenzene in the rat
I. Romero, A. W. Brown, J. B. Cavanagh, C. C. Nolan, D. E. Ray and M. P. Seville

509 Case report. Glioblastoma multiforme of the hippocampus in advanced Alzheimer's disease
E. C. Poole and J. J. Kepes

515 Proceedings of the eighty-second meeting of the British Neuropathological Society. Joint meeting with the German Society for Neuropathology and Neuroanatomy

535 Obituary: Dr David R. Oppenheimer

537 Future meetings

538 Book reviews

541 Author and subject index to Volume 17